UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,487	09/21/2004	Khamir Girish Joshi	04-11	5486
	7590 09/22/200 OWN & ROOT LLC	EXAMINER		
ATTN: Christia	n Heausler	SINGH, SUNIL		
4100 Clinton D HOUSTON, TX			ART UNIT	PAPER NUMBER
			3672	
			MAIL DATE	DELIVERY MODE
			09/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Annl	ication No.	Applicant(s)				
Office Action Summary			11,487	JOSHI ET AL				
		Exan		Art Unit				
			Singh	3672				
The MAIL	ING DATE of this commun				 ce address			
Period for Reply								
WHICHEVER IS  - Extensions of time m after SIX (6) MONTH-  - If NO period for reply  - Failure to reply within Any reply received by	STATUTORY PERIOD FOR LONGER, FROM THE MINIOR AND	AILING DATE O of 37 CFR 1.136(a). In lunication. atutory period will apply will, by statute, cause the	F THIS COMMUN no event, however, may and will expire SIX (6) Mine application to become	NICATION. a reply be timely filed ONTHS from the mailing date of ABANDONED (35 U.S.C. § 133	this communication.			
Status								
1) Responsiv	e to communication(s) file	d on <i>01 August :</i>	2008.					
	This action is <b>FINAL</b> . 2b) This action is non-final.							
<u> </u>	<del>/ _</del>							
closed in a	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Clair	ms							
4)⊠ Claim(s) <u>5</u>	<u>8-62 <i>and 64-</i>72</u> is/are pen	ding in the applic	cation.					
4a) Of the	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□ Claim(s) _	5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>5</u>	6)⊠ Claim(s) <u>58-62, 64-72</u> is/are rejected.							
	7) Claim(s) is/are objected to.							
8) <u></u> Claim(s) _	are subject to restric	tion and/or electi	on requirement.					
Application Papers								
9)☐ The specifi	cation is objected to by the	e Examiner.						
10)∐ The drawin	g(s) filed on is/are:	a) accepted o	or b) 🔲 objected t	o by the Examiner.				
Applicant m	ay not request that any object	ction to the drawing	g(s) be held in abey	ance. See 37 CFR 1.85(	a).			
	nt drawing sheet(s) including		·	<del>-</del> · · · · ·	• ,			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U	.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
<u> </u>								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
			·					
Attachment(s)								
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application								
Paper No(s)/Mail Date 6) Other:								

Application/Control Number: 10/711,487 Page 2

Art Unit: 3672

## **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

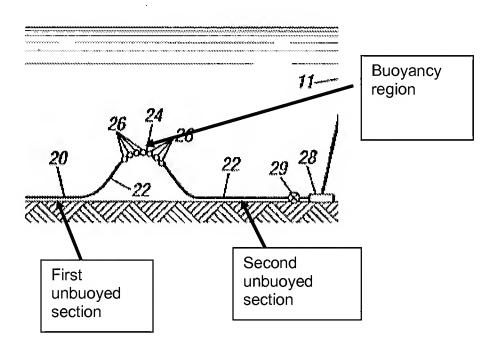
The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Application/Control Number: 10/711,487 Page 3

Art Unit: 3672

2. Claims 66-68,71,72 are rejected under 35 U.S.C. 102(b) as being anticipated by Richmond et al. (US 5582252)

Richmond et al. discloses a pipeline comprising a first unbuoyed section (see drawing below, Fig. 2), second unbuoyed section (see drawing below, Fig. 2), at least one buoyancy section (24,26) disposed between the first and second sections.



3. Claims 66-69,71,72 rejected under 35 U.S.C. 102(a) as being anticipated by Wipo '014. (WO 2004/068014).

Wipo '014 discloses a pipeline comprising a first unbuoyed pipeline section (2), a second unbuoyed pipeline section (3), at least one distributed buoyancy section (6,25,26) comprising two or more buoyancy solutions (36, see Figs. 1,5-7, col. 4 line 1).

4. Claims 58-59, 61-62, 64-65 are rejected under 35 U.S.C. 102(a) as being anticipated by Wipo '014. (WO 2004/068014).

Wipo '014 discloses an apparatus (1) to traverse a seabed topographic feature comprising a subsea pipeline (1) constructed to carry fluids from a first location (this is considered as the left of Fig. 1) across the topographic feature to a second location (this is considered as the right of Fig. 1) wherein the topographic feature is selected from the group consisting of subsea, basins, domes, valleys, cliffs, canyons, escarpments and combinations thereof, said pipeline including at least one distributed buoyancy region (6,25,26) said pipeline comprising a first unbuoyed pipeline section (2) extending from said first location on a sea floor (4) to said distributed buoyancy region and a second unbuoyed pipeline section (3) extending from said distributed buoyancy region to said second location on a sea floor and said distributed buoyancy region connecting said first and said second pipeline sections in fluid communication. The two buoyancy solutions (36, see Figs. 1,5-7, col. 4 line 1) and the flexible positively buoyant inverse section is considered as the section where (36, see Figs. 1,5-7, col. 4 line 1

buoyancy members are positioned). Tether system (see Figures). First flexure (7) and second flexure (8).

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al..

Richmond et al. discloses the invention substantially as claimed. However, Richmond et al. is silent about the buoy(26) being tethered. The examiner takes official notice that tethered buoys are old and well known. It would have been considered obvious to one of ordinary skill in the art to modify Richmond et al. to make his buoys tethered buoys since such a modification is a design choice.

7. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. in view of Moses et al. (Us 5615977).

Richmond et al. discloses the invention substantially as claimed. However, Richmond et al. is silent about the buoy(26) being a buoyant coating. Moses et al. teaches buoy being a buoyant coating (42, Fig. 3). It would have been considered obvious to one of

Art Unit: 3672

ordinary skill in the art to modify Richmond et al. to make his buoys in the form of buoyant coating as taught by Moses et al. since such a modification is a design choice. Such modification prevents rupturing.

8. Claim 60, 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wipo '014 in view of Moses et al. (Us 5615977).

Wipo '014 discloses the invention substantially as claimed. However, Wipo '014 is silent about the buoyancy modules (see col. 4 line1) being a buoyant coating. Moses et al. teaches buoyancy modules being a buoyant coating (42, Fig. 3). It would have been considered obvious to one of ordinary skill in the art to modify Wipo '014 to make his buoyancy modules in the form of buoyant coating as taught by Moses et al.. since such a modification is a design choice. Such modification prevents rupturing.

## Response to Arguments

- 9. Applicant's arguments filed 8/1/08 have been fully considered but they are not persuasive. Applicant argues that Richmond et al. makes no mention of laying a pipeline across a topographic feature. The examiner disagrees. See Figure 2, topographic is defined as surface feature of a region, wherein the surface feature could be flat; therefore, Richmond et al. shows laying a pipeline across a topographic feature.
- 10. With regards to WO '014 applicant argues that frame 25 is not the bridging duct section. The examiner agrees. Bridging duct section (6) is made up of member (25) and member (26) which is construed as the "distributed buoyancy region". Applicant

Art Unit: 3672

argues the WO '014 makes no mention of the number of buoyancy members. The examiner agrees. However, there are at least two buoyancy members 36 and at least two buoyancy members on member 25 (see page 4 line 1). See Figure 6, member (36) is directly attached to member (6,25,26). With regards to the "spatial arrangement" limitation, the buoyancy members mentioned above are in spatial arrangement. Since "spatial" is defined as "with distribution or location across a landscape or surface". Applicant argues that the examiner modified Richmond without any evidence or teaching to have the buoyancy-providing module be a tethered buoy. The examiner took the teaching that it is well known to have buoyancy providing module be a tethered buoy by simply stating that "the examiner takes official notice that Tethered buoys are old and well known. For example see US Patent 6811355, Figure 2 member 4.

#### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number: 10/711,487

Art Unit: 3672

the advisory action. In no event, however, will the statutory period for reply expire later

Page 8

than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051.

The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/

Primary Examiner, Art Unit 3672

Sunil Singh Primary Examiner

Art Unit 3672

SS

9/12/08

Application/Control Number: 10/711,487

Page 9

Art Unit: 3672